

APPENDIX O
HEARING CONSERVATION

1. Purpose. The purpose of this appendix is to eliminate occupational noise-related hearing loss among Buffalo District personnel.

2. Applicability. This appendix applies to all elements of the Buffalo District. The provisions of this appendix do not apply to deaf personnel as defined in ANSI S3.20.

3. References.

- a. EP 385-1-58, Medical Surveillance.
- b. ER 385-1-89, Hearing Conservation.
- c. 29 CFR 1910.95, OSHA, Occupational Noise Exposure.
- d. 29 CFR 1926.52, OSHA, Occupational Noise Exposure.
- e. MIL STD 1472C, Human Engineering.
- f. MIL STD 1474B, Noise Limits.
- g. TB MED 501, Hearing Conservation.
- h. EM 385-1-1, Safety and Health Requirements Manual.

4. Background. Noise is unwanted sound and it is transmitted, primarily, to the ear through air. It may injure the hearing mechanism. Noise-induced hearing loss may be temporary or permanent, depending on the frequency and intensity of the noise and the duration of exposure. Temporary hearing loss or temporary threshold shift results from auditory fatigue induced by exposure to intensive sound, and there is a return of the individuals pre-exposure hearing level after a period of time away from intensive sound. Permanent hearing loss or permanent threshold shift results from damage to the end organ of the inner ear and it is not reversible by any known treatment.

5. Requirements.

a. Each supervisor is responsible to implement and be familiar with the criteria established in this appendix. They are responsible for identifying those areas where employees are exposed to high noise levels, posting of noise hazardous areas,

use of engineering controls, education on prevention of hearing loss, and use of personal protective equipment. Noise hazards will be included in the Job Hazard Analysis.

b. Supervisors shall notify the S&OH Office of suspected noise hazardous areas. The S&OH Office shall conduct noise surveys to determine the level of exposure. In areas where employees are subjected to noise levels of 85 dbA continuous or 140-dBA impulse regardless of duration, engineering and/or administrative controls (limiting the duration of exposure, etc.) will be implemented to reduce the noise hazard. In noise hazardous areas where engineering and/or administrative controls are not feasible, any employee exposed to 85 dbA or greater shall be provided hearing protection devices and will be entered in the District Medical Surveillance Program. Nobody should be exposed to impulse or impact noise above 140 dbA peak sound pressure level.

6. Responsibilities:

a. Supervisors shall:

(1) Request the S&OH Office to measure and analyze all areas and equipment suspected of being noise hazardous. An area where one has to shout to communicate is probably over 85 dbA. DD Form 2214 shall be completed for every noise survey.

(2) Post signs or sticker labels on equipment and/or areas where noise is a hazard.

(3) Enforce the use of hearing protective equipment.

(4) Include noise exposure in employees Job Hazard Analysis.

(5) Inform the Personnel Office of positions where noise is hazardous to employees.

(6) Ensure engineering controls are established to protect employees from noise hazards.

(7) Requisition hearing protection equipment with the lowest noise emission levels performance requirements for noise environment.

(8) Ensure that only hearing protective devices meeting requirements established by ANSI S3.19, are issued to employees exposed to noise hazard areas.

(9) Ensure that the applicable job description contains the requirement employee must wear hearing protection in performance of the job.

(10) Use disciplinary actions when necessary to enforce the proper use of hearing protection.

(11) Ensure that employees receive orientation and ongoing training on hearing conservation during safety meetings.

(12) Ensure that employees exposed to a noise hazardous work environment are considered for inclusion in the Hearing Conservation Program.

b. Employees shall:

(1) Wear provided proper hearing protection when required.

(2) Report for Audiometric testing when required.

(3) Attend and participate in periodic safety and occupational health training.

c. Safety and Occupational Health Office shall:

(1) Use only calibrated equipment for measuring and analyzing noise.

(2) Notify supervisors of areas or equipment that produce hazardous noise.

(3) Maintain all noise survey records for 40 years.

(4) Make provisions to schedule personnel for audiometric testing and yearly follow-up hearing tests for all personnel included in the Hearing Conservation Program.

(5) Ensure audiometric testing is conducted by a physician, audiologist, otolaryngologist, or by a certified

CELRB 385-1-1
APP O
1 Jul 99

technician under the supervision of one of the listed professionals.

(6) Ensure that the audiometric testing is conducted in an environment which allows 0 dbA hearing levels at test frequencies of 500, 1000, 2000, 3000, 4000, and 6000 Hz. Testing shall also include puretone, air conductive hearing threshold levels in each ear with test frequencies of at least 500, 1000, 2000, 3000, 4000, and 6000 Hz.

(7) Notify employees of any validated standard threshold shift (STS) in hearing loss further retesting.

(8) Maintain a roster of all personnel included in the Hearing Conservation Program.

e. Human Resources shall ensure that each job description of positions requiring inclusion in the Hearing Conservation Program reflect that information.

d. Engineering Division shall include noise abatement and noise considerations in their design work.